



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| 1349.1278 | |
|-----------------------|-----------------------|
| 13 13.1270 | 2721 |
| EXA | MINER |
| TRAN, LY T | |
| ART UNIT | PAPER NUMBER |
| 2853 | |
| OATE MAILED: 03/03/20 |)5 |
|) | ATE MAILED: 03/03/200 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | |
|--|---|--|--|--|
| | 10/642,689 | YANG, YONG-SOK | | |
| Office Action Summary | Examiner | Art Unit | | |
| | Ly T. TRAN | 2853 | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the o | correspondence address | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | I36(a). In no event, however, may a reply be tingly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133). | | |
| Status | | , | | |
| 1) Responsive to communication(s) filed on | · | • | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | s action is non-final. | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | |
| Disposition of Claims | | | | |
| 4) \boxtimes Claim(s) <u>1-20</u> is/are pending in the application | · . 1. | • | | |
| 4a) Of the above claim(s) is/are withdra | | | | |
| 5) Claim(s) is/are allowed. | | | | |
| 6)⊠ Claim(s) <u>1 and 10-12</u> is/are rejected. | • | | | |
| 7)⊠ Claim(s) <u>2-9 and 13-20</u> is/are objected to. | | | | |
| 8) Claim(s) are subject to restriction and/o | or election requirement. | | | |
| Application Papers | | | | |
| 9) The specification is objected to by the Examine | er. | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | |
| 11)☐ The oath or declaration is objected to by the E | xaminer. Note the attached Offic | e Action or form PTO-152. | | |
| Priority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a claim for foreign | n priority under 35 U.S.C. § 119(a | a)-(d) or (f). | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | |
| 1. Certified copies of the priority documents have been received. | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | |
| 3. Copies of the certified copies of the price | ority documents have been receiv | ved in this National Stage | | |
| application from the International Burea | u (PCT Rule 17.2(a)). | | | |
| * See the attached detailed Office action for a list | t of the certified copies not receiv | ved. | | |
| | | • | | |
| , AMaaharaan(a) | | , | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) 🔲 Interview Summar | ry (PTO-413) | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail [| Date | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date | 5) Notice of Informal 6) Other: | Patent Application (PTO-152) | | |

Art Unit: 2853

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipate by Shibata et al. (USPN 6,247,783).

With respect to claim 1, Shibata discloses an ink jet printer comprising:

- A guide shaft (Column 4: line 48, Fig.1: element 44);
- A carriage supported by the guide shaft and reciprocating thereon (Fig.1: element 45, Column 4: line 49-50);
- An ink cartridge mounted in the carriage and having print head to eject ink
 on an ink ejecting area of a printing paper (Fig.1: element 50, 52, 54, 56,
 Column 5: line 3-5);
- A feeding roller to convey the printing paper to the print head (Column 4: line 19-23);
- A waste ink-collecting unit to collect waste ink that is ejected from the print
 head onto an area other than the printing paper (Fig.3: element 80);
- The waste ink collecting unit comprising a waste ink collecting tank (Fig.3:
 element 100) disposed adjacent to the print head to collect the waste ink

Art Unit: 2853

from the print head and a collecting roller (Fig.3: element 90) rotatable disposed at an entrance of the collecting tank, to guide the waste ink from the print head to the collecting tank

2. Claims 10-12 are rejected under 35 U.S.C. 102(b) as being anticipate by Matsumoto et al. (USPN 6,352,333).

With respect to claims 10-12, Matsumoto discloses an apparatus comprising:

- A print head (Fig.4: element 1) to eject ink toward a paper;
- A frame (Fig.4: element 3) to guide the paper, the frame forming a hole
 (Fig.4, Fig.13) to pass the ejected ink not received by the paper;
- Paper maintains a constant had gap with the frame (by having the frame
 3, a constant gap is provided between the head and the paper;
- A waste collector (Fig.4: element 7, Column 5: line 49-54) to collect the ink
 which has passed through the hole.

Allowable Subject Matter

3. Claims 2-9 and 13-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-9 are allowable over prior art of record because at least prior art have not been found to anticipate or teach that the waste ink collecting unit comprises a

Art Unit: 2853

paper guide frame having an opening corresponding to the ink ejecting area and the collecting roller.

Claims 13-20 are allowable over prior art of record because at least prior art have not been found to anticipate or teach the waste collector comprising a first roller to receive the ink which is passed through the hole.

Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Suzuki (USPN 5,291,227) discloses the paper guide frame (Fig.1: element 12).
 Any inquiry concerning this communication or earlier communications from the
 examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155.

 The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Art Unit: 2853

Page 5

you have questions on access to the Private PAIR system, contact the Electronic.

Business Center (EBC) at 866-217-9197 (toll-free).

LT

Feb.28, 2005

Stephen D. Meier Primary Examiner

1964MHEH MENER BILLION TO THE PROPERTY OF THE